

CLAIMS:

1. A method of non-linear processing of at least one set of input parameter values (Y,S,H) of input picture signals (R,G,B,) so as to produce output picture signals (R', G', B'), with output parameter values (Y', S', H), characterized in that the non-linear processing is responsive to hue values (H) of the input picture signals (R,G,B).

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2. A method as claimed in claim 1, wherein the non-linear processing involves the steps of determining a power γ_h depending on the hue values (H), and raising a saturation-related input parameter value S to the power γ_h .

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3. A method as claimed in claim 2, further comprising the step of adapting the power γ_h based on histogram data derived from the input parameter values (Y,S,H).

4. A method as claimed in claim 1, wherein the non-linear processing involves the steps of determining a power γ_Y depending on the hue values (H), and raising a

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brightness-related input parameter value (Y) to the power γ_Y .

5. A method as claimed in claim 4, further comprising the step of adapting the power γ_Y based on histogram data derived from the input parameter values (Y,S,H).

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6. A method as claimed in claim 2, wherein the non-linear processing of the saturation related input parameter value S depends on maximum saturation values S_{max} .

7. A method as claimed in claim 6, wherein the maximum saturation values S_{max} depend on the hue values (H).

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8. A method as claimed in claim 6, wherein the maximum saturation values S_{max} depend on a brightness-related output parameter value (Y').

9. A method as claimed in claim 6, wherein a saturation-related output parameter value S' is substantially determined by the equation:

$$S' = S_{\max} (S / S_{\max})^{\gamma_h}.$$

5 10. A method as claimed in claim 3, wherein, for a predetermined hue value (H), the power γ_h is adapted on the basis of a weighed, average saturation value of the input picture signals, representing pixels in a window of an image.

11. A method as claimed in claim 10, wherein, for a predetermined hue value (H),
10 the power γ_h for a current window is adapted in dependence on the histogram data of the current and/or a previous window.

12. An apparatus comprising picture processing circuitry for carrying out the method as claimed in claim 1.